


AQAR 2022-23

**2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by
the institution**

SIES has implemented Outcome Based Education for all the UG programs on the first-year level from the academic year 2021-22. The students are made aware of the COs through syllabus and also during lectures by the teachers. In the subsequent year, 2022-23, the institution has made a sample-based attempt to measure the attainment of CO and PO's in the absence of an ERP. Based on the positive experience the college will explore to measure them for all departments using the new ERP.




Principal
SIES College of Arts, Science &
Commerce (Autonomous)
Sion (West), Mumbai - 400 022.

**SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS),
SION WEST, MUMBAI – 400 022.
SEMESTER END EXAMINATION**

Class: SYBA

Semester: IV

Paper Title: Applied Component

Subject: Comparative Study of Religions

Paper code: SIUACOR 41

Day:

Date:

Time:

Maximum Marks: 60

NOTE: 1. Attempt all four questions with the given choice.

2. Figures to the right indicate maximum marks.

Q.1. (a) Explain in detail the concept of God and nature of world as conceived in Hinduism. (15)

OR

Q.1. (b) Bring out the significance of prayer and worship in Hinduism. Write a note on *Samskaras* or milestone rites in *Hindu Dharma*. (15)

Q.2. (a) Why is Jainism called a *Shramana* and *Nastika* tradition Discuss at length the Jain calendar. (15)

OR

Q.2. (b) How would you express the concept of life after death and human destiny as mentioned in Hinduism and Jainism? (15)

Q.3. (a) Elaborate on the main ideas of the scriptures in *Buddha Dhamma*. What caused the formation of major sects in Buddhism? (15)

OR

Q.3. (b) How would you prove the significance of *Dhamma* with special reference to *Arya satyanis* and *Arya Astangika marga*? (15)

Q.4. (a) Is Sikhism a syncretic faith? Bring out the socio-cultural roots of Sikhism with reference to the teachings of Gurus. (15)

OR

Q.4. (b) In context of fundamental beliefs in Sikhism, examine the concepts of human status, evil and suffering. (15)

Name of the Programme	Bachelor of Arts		Programme Code	SIUAPHI	Name of the Department	Philosophy
Class	Semester	Course Code	Course Name	No. of Lectures/PER WEEK	Credits	Marks
SYBA	IV	SIUACOR 41	Comparative Study of Religions	45/4	2	40 + 60 = 100

Learning Outcomes -

Comparative Study of Religions Course aims at enhancing the skill and attitude based programme outcomes while mapping them with knowledge competencies as listed below:

Affinity with PO nos.	COs	Statements	Cognitive Levels
3	CO1	Illustrate the evolving nature of the Indian origin religions	U
4, 8	CO2	Develop conceptual understanding of Indian traditional beliefs with a scientific rationale	U, AN
3, 5, 7	CO3	Explain the importance of ethico-religious experiences	Ap

PO- Program Outcome, CO-Course Outcome;

Bloom's Levels: U-Understanding; Ap-Applying; An-Analyzing; E-Evaluating

Q. No.	Questions	Marks	Bloom's level	CO Nos.	PO Nos.
Q.1. a)	Explain in detail the concept of God and nature of world as conceived in Hinduism.	(15)	U	1	3
	OR				
b)	Bring out the significance of prayer and worship in Hinduism. Write a note on <i>Samskaras</i> or milestone rites in <i>Hindu Dharma</i> .	(15)	Ap	2	3,7
Q.2. a)	Why is Jainism called a <i>Shramana</i> and <i>Nastika</i> tradition? Discuss at length the Jain calendar.	(15)	An	3	4,7
	OR				
b)	How would you express the concept of life after death and human destiny as mentioned in Hinduism and Jainism?	(15)	An	1	3
Q.3. a)	Elaborate on the main ideas of the scriptures in <i>Buddha Dhamma</i> . What caused the formation of major sects in Buddhism?	(15)	An	3	4,8
	OR				
b)	How would you prove the significance of <i>Dhamma</i> with special reference to <i>Arya satyanis</i> and <i>Arya Astangika marga</i> ?	(15)	An	3	3,8
Q.4. a)	Is Sikhism a syncretic faith? Bring out the socio-cultural roots of Sikhism with reference to the teachings of Gurus.	(15)	Ap	2	5
	OR				
b)	In context of fundamental beliefs in Sikhism, examine the concepts of human status, evil and suffering.	(15)	Ap	1	3

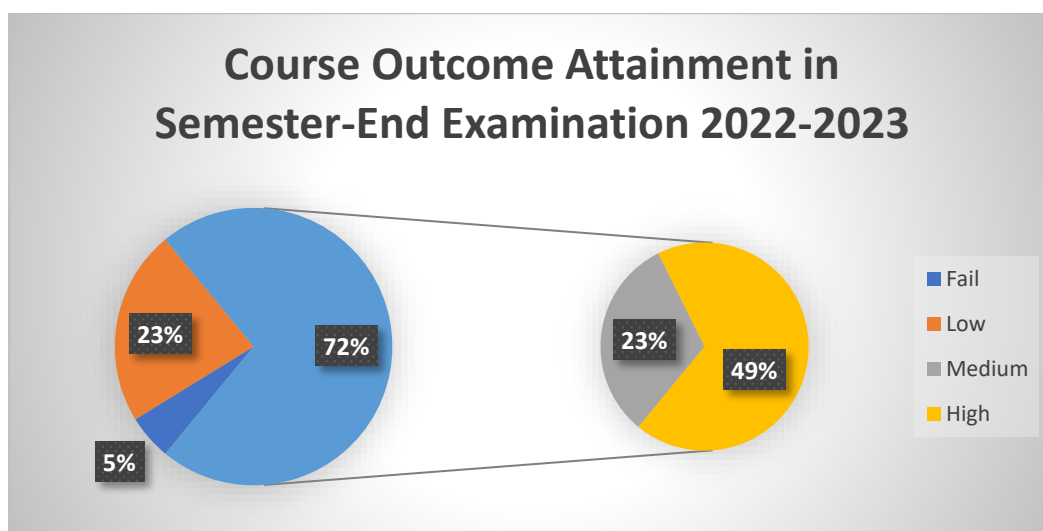
CO/PO	PO 3	PO 4	PO 5	PO 7	PO 8
CO 1	2	-	-	-	-
CO 2	2	1	2	3	-
CO 3	2	1	-	2	1

High- 3; Medium – 2; Low- 1

4. Programme Outcomes and Programme Specific Outcomes POs and PSOs in B.A. Philosophy

On completion of Graduation in B.A. Philosophy the learners shall be able to demonstrate and attain the following graduate attributes at Cognitive, Skill and Attitude levels for the award of the qualifying degree.

POs	PO Statements
COGNITIVE LEVEL	
PO3 <i>Reasoning ability and Rational thinking</i>	Think rationally and analyze socio-cultural-legal issues with decisive responsibility that promote community welfare.
SKILL LEVEL	
PO4 <i>Research skill</i>	Integrate the contextual knowledge in an inter-disciplinary framework by exercising the analytical skill, research ability, creativity, for employability and collaborating with industries.
PO5 <i>Effective Communication skill</i>	Facilitate the ability to speak, read, write, listen effectively in Indian languages, other medium of instructions and enhance the use of digital communication tools.
ATTITUDE LEVEL	
PO7 <i>Ethical values</i>	Recognize and respect different value systems with a commitment to fulfil one's own professional duties and responsibilities.
PO8 <i>Self-directed Learning</i>	Demonstrate the ability to keep evolving in life-long learning and upgrade with the changing global and technological advancements.



Fail	3
Low	13
Medium	13
High	28
No. of Students appeared for the examination	57

**S.I.E.S. COLLEGE OF ARTS, SCIENCE AND COMMERCE
(EMPOWERED AUTONOMOUS)
SION (WEST), MUMBAI-400 022**

**Department of Biotechnology
Program : MSc Biotechnology**

SR. NO.	Details
PO1.	<p>Solving Complex Problems:</p> <p>Applying the knowledge of various courses learned under the program to break down complex problems to simple components by designing processes for problem solving</p> <p><i>Cognitive Levels: An, Ap</i></p>
PO2.	<p>Critical Thinking and reasoning ability:</p> <p>Equipping to select, create and apply the appropriate tools and techniques through electronic media for the purpose of understanding and analyzing data and drawing inference keeping in mind its limitations and disadvantages</p> <p><i>Cognitive Levels: U, An</i></p>
PO3.	<p>Research Aptitude:</p> <p>Utilizing the acquired contextual knowledge in an interdisciplinary framework. Integrating research-based knowledge and research-based methods involving problem definition, analysis and interpretation of data followed by its consolidation to arrive at valid conclusions</p> <p><i>Cognitive Levels: Ap, An, E, C</i></p>
PO4.	<p>Proficiency with ICT:</p> <p>Facilitating to write and document effectively; make crisp presentations and reports and convey the message/ instructions/findings clearly as well as using ICT tools in analyzing data.</p> <p><i>Cognitive Levels: U, Ap</i></p>
PSO1.	<p>Understand the need for research and innovation in the field of Biotechnology</p> <p>Prepare, plan and execute a research project independently as well as critically evaluate and interpret results</p> <p><i>Cognitive Levels: U, Ap</i></p>
PSO2.	<p>Practical Applications:</p> <p>Design and execute experiments applying the concepts learnt and thereby being able to translate theoretical knowledge to practical knowledge</p> <p><i>Cognitive Levels: Ap, An</i></p>

SIPSBT41 – Nanotechnology and IPR

CO. No.	Course Outcome of SIPSBT41 Upon completion of this course, the learner will be able to	Cognitive Level	Affinity with PO/ PSO
CO1	The various aspects of Nanotechnology	U, R	PO1, PSO1
CO2	Understand the applications of nanotechnology	U, R	PO1, PSO1
CO3	Use of IPR in the biological sciences	An, U	PO1, PSO1
CO4	Importance of patents in the field of research	U, An	PO1, PSO1

Question Paper

1. Elaborate on the synthesis of nanomaterials using biotemplates. (12)
(CO1 / BTL2)

OR

1. (a) Discuss the top-down approach for synthesis of nanomaterials. (6)
(CO1 / BTL2)
- (b) Justify : Bacterial flagella is a natural nanorobotic device. (6)
(CO1 / BTL5)

2. Give an account of the applications of nanotechnology in medicine and healthcare. (12)
(CO1 / BTL2)

OR

2. (a) Explain the methods for in-vitro testing of nanotoxicity. (6)
(CO1 / BTL2)
- (b) Write a note on environmental applications of nanomaterials. (6)
(CO1 / BTL2)

3. What are novel and extant varieties? State the criteria for their protection under PPV&FR. (12)
(CO2 / BTL1)

OR

3. (a) State the significance of geographical indications and their protection. (6)
(CO3 / BTL1)
- (b) Describe the advantages and disadvantages of trade secrets. (6)
(CO3 / BTL2)

4. Discuss the patentability of biotechnological inventions in India and abroad. (12)
(CO4 / BTL2)

OR

4. (a) Outline the process of patenting in India. (6)
(CO4 / BTL2)

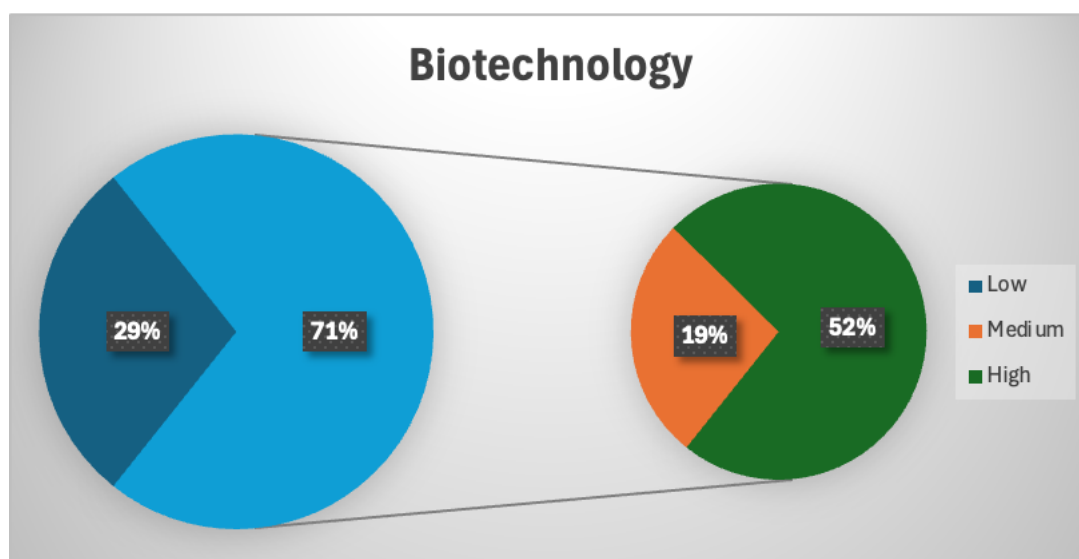
(b) Elaborate on the assignment and licensing of patents. (6)
(CO4 / BTL2)

5. Write a short note on **any three** of the following: (12)
(CO1/2/3/4 / BTL2)

- (a) Carbon nanotubes
- (b) Ecotoxicity analyses of nanomaterials
- (c) Industrial design
- (d) Patent databases
- (e) Patent applications

Overall analysis

Bloom Taxonomy Level (BTL)	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create
Percentage of Questions	15	77	-	-	8	-



52% of students showed high level of attainment, 19% had medium attainment and 29% had low attainment.

**SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS),
SION WEST, MUMBAI – 400 022.
SEMESTER END EXAMINATION**

Class: MSc

Semester: II

Subject: Zoology

Title: Physiological Processes III

Paper code: SIPSZOPHY41

Day:

Date:

Time:

Maximum Marks: 60

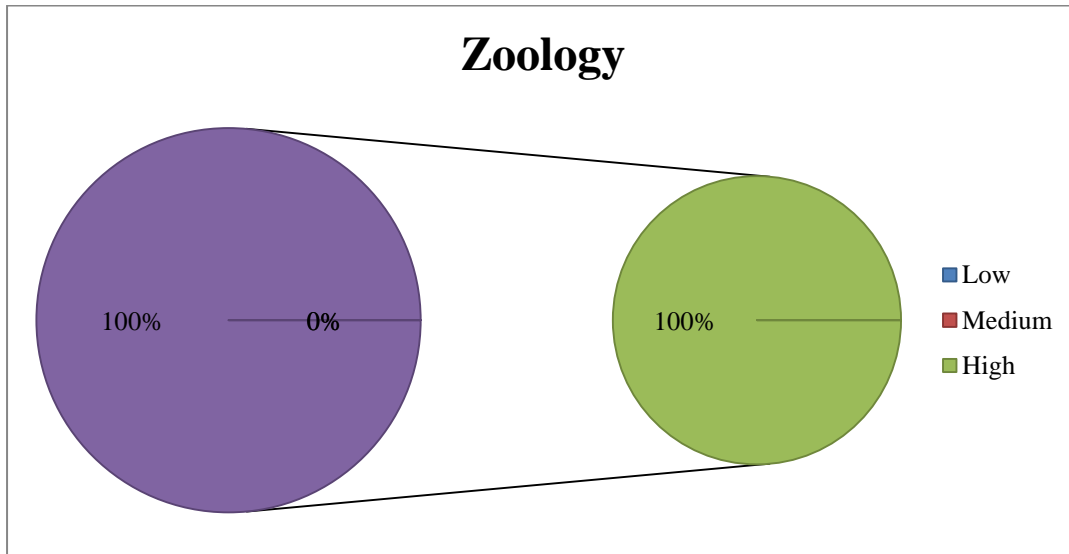
**NOTE: 1. Attempt all four questions with the given choice.
2. Figures to the right indicate maximum marks.**

Module 1: Comparative Endocrinology				
Module 2: Basics of Neurobiology				
Module 3: Physiology of Nervous System				
Module 4: Sensory system				
COs	Statements	Cognitive Levels	Affinity with	
			PO nos.	PSO nos.
CO1	Comparative Endocrinology emphasizes on many complexities of vertebrate and invertebrate endocrine systems at the sub-molecular, molecular, cellular, and at an organismal level of analysis	U, R, An	1,2	1, 2
CO2	Knowledge of the organization of the nervous system and nerve conduction and fundamental information about the cellular biology and electrophysiological properties of neurons, neuroanatomy	U, R, An	1, 2	1,2
CO3	Gain insights about the normal functioning of the nervous system in various animal kingdoms.	U, An	1,2	1, 2
CO4	Gain information about the molecular mechanisms and neural systems used by vertebrates and invertebrates to sense the external and internal world and the comparative approach helps to understand common principles of sensory coding as well as the unique strategies employed to address specific biological needs.	An, R	1,2	1, 2
PO- Program Outcome, PSO-Program Specific outcome; CO-Course Outcome; Bloom's Taxonomy Levels: R-Remembering; U-Understanding; An-Analysing				

Serial Number	Details of Programme Outcomes (POs)
PO1 (Skill Level)	Problem Solving Ability (<i>U, Ap</i>) Apply the knowledge of various courses learned under a program to break down complex problems into simple components. Adopt and assimilate problem-based learning models and apply one's learning to solve real life problem situations.
PO2 (Skill Level)	Critical Thinking (<i>U, An, E</i>) Develop critical thinking based on a rationale to identify assumptions, verifying the accuracy and validity of assumptions, and making informed decisions. Inculcate the ability of logical reasoning to question the rationale behind concepts, ideas, and perspectives.

Question no.	Comprehension Or Understanding	Application	Analysis	Evaluation Or Judging	Total Marks [Including choice]
Q 1	With the help of schematic illustration, discuss the neuroendocrine system in mammals. (7 marks)	Add a note on the function and feedback system of oxytocin and vasopressin (8marks)	---		15 marks
Q 1	In the context of comparative endocrinology, comment on the following: b) Corpuscles of stannius and ultimobranchial bodies (7 marks)	---	a) Evolution of pineal gland and its role as a biological clock (8 marks)	---	15 marks
Q 2	With reference to Neurobiology, discuss the basic anatomy and types of neurons. (7 marks)	---	Add a note on action potential generation and conduction (8 marks)	---	15 marks
Q 2	In the context of Neurobiology, give an account of the following: a) Synapse classification and conduction. (7 marks)	b) Working mechanism of learning and memory (8marks)	---	---	15 marks
Q 3	With the help of diagrammatic representation, illustrate the nervous system of Scoliodon. (15 marks)	---	---	---	15 marks
Q 3	In the context of physiology of nervous system, discuss the following: a) Nervous system of rat (7 marks)	---	b) Compare and contrast the nervous system of Annelids and Arthropoda (8 marks)	---	15 marks
Q 4	With reference to sensory system, give an account of chemoreception. (15 marks)	---	---	---	15 marks
Q 4	In the context of sensory system, comment on the following: a) Types of senses and classification of receptors. (8 marks)	---	b) Electroreception in fish. ---	---	15 marks
	(73 marks)	(16 marks)	(31 marks)	(0 marks)	(120) 60
%	60%	13.3%	25.8%	0%	100%

Student Attainment Level (Percentage):



SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE (EMPOWERED AUTONOMOUS)

SION WEST, MUMBAI – 400 022

SEMESTER END EXAMINATION

Class: SYBA

Semester: IV

Max marks: 60

Subject: HINDI

Paper: II

Course name: MASS MEDIA AND HINDI

Course Code: SIUAHIN42

Day:

Date:

Time:

NOTE – 1 - ALL QUESTIONS ARE COMPULSORY.

2 - SEPARATE ANSWER SHEET TO BE GIVEN.

SEMESTER IV

Course Code	Semester	Credits	Lectures/week	Course Name
SIUAHIN 42	4	3	3L	Mass Media and Hindi
Module 1-Mass Media –meaning, definition & scope				
Module 2 –development & types of mass media				
Module 3 – medium based writing & drafting for mass media lingual characteristics of mass media				
Module 4-fundamental rights and RTI				

CO No.	Outcomes	Cognitive Level	Affinity PO/PSO
CO1	Remember and understand the elements of Mass Media and its History & tradition in Hindi	R,U	PO2, PO3 & PSO1
CO2	Analyze various aspects of Mass Media and communication	U,An	PO2 & PO3,PSO2
CO3	Understand and analyze the different forms of Mass Media & its utility in larger context	U, An	PO1,PO2, PO4 & PSO2
CO4	Evaluate the social, political, cultural & Psychological impact of Mass Media in rural & urban India & create content suitable to nature of society & the various platforms of Mass Media	An, E & C	PO1, PO2, PO8 & PSO3

प्रश्न -1निम्नलिखित प्रश्न का उत्तर लिखिए। (15)

जनसंचार के स्वरूप पर चर्चा करते हुए, उसकी परिभाषाओं पर प्रकाश डालें ?

अथवा

इलेक्ट्रॉनिक जनसंचार माध्यमों के स्वरूप की समीक्षा कीजिए ?

प्रश्न -2निम्नलिखित प्रश्न का उत्तर लिखिए। (15)

इंटरनेट व मोबाइल के विकासक्रम को स्पष्ट कीजिए ?

अथवा

दूरदर्शन व सिनेमा के क्रमगत विकास पर प्रकाश डालिए ?

प्रश्न -3निम्नलिखित विषयों में से किन्हीं तीन पर टिप्पणी लिखिए। (15)

1-समाचारपत्र की भाषा

2-रेडियो की भाषा

3-साक्षात्कार के प्रमुख तत्त्व

4-संवाद की विशेषताएँ

5-फीचर की विशेषताएँ

प्रश्न -4निम्नलिखित प्रश्न का उत्तर लिखिए। (15)

संविधान द्वारा दिए गए मौलिक अधिकारों का विश्लेषण कीजिए ?

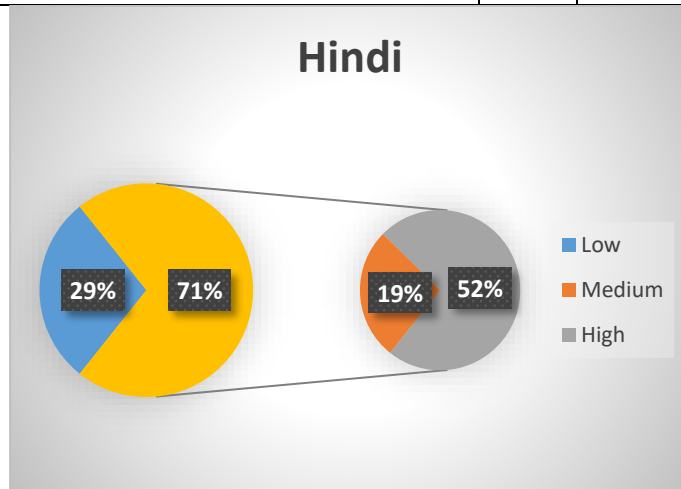
अथवा

'उरी' फिल्म की समीक्षा लिखिए ?

Question no.	Comprehension Or Understanding	Application	Analysis	Evaluation Or Judging	Total Marks [With choice]
1- निम्नलिखित प्रश्न का उत्तर लिखिए। जनसंचार के स्वरूप पर चर्चा करते हुए, उसकी परिभाषाओं पर प्रकाश डालें ?	5	5	5	-	15
	अथवा				
1 - इलेक्ट्रॉनिक जनसंचार माध्यमों के स्वरूप की समीक्षा कीजिए ?	5	5	5	-	15
2 -निम्नलिखित प्रश्न का उत्तर लिखिए। इंटरनेट व मोबाइल के विकासक्रम को स्पष्ट कीजिए ?	8	-	7	-	15

	अथवा					
2 - दूरदर्शन व सिनेमा के क्रमगत विकास पर प्रकाश डालिए ?	8	-	7	-	15	
3-1-निम्नलिखित विषयों में से किन्हीं तीन पर टिप्पणी लिखिए। 1-समाचारपत्र की भाषा	3	-	2	-	5	
3-2 - रेडियो की भाषा	3	-	2	-	5	
3-3 - साक्षात्कार के प्रमुख तत्व	3	-	2	-	5	
3-4 - संवाद की विशेषताएँ	3	-	2	-	5	
3-5 - फीचर की विशेषताएँ	3	-	2	-	5	
4- निम्नलिखित प्रश्न का उत्तर लिखिए। संविधान द्वारा दिए गए मौलिक अधिकारों का विश्लेषण कीजिए ?	3	4	5	3	15	
	अथवा					
4 - उरी ' फिल्म की समीक्षा लिखिए ?	3	4	5	3	15	
MARKS	25	9	23	3	60	
%	41.67%	15%	38.33%	5%	100%	
Q. No.	Questions	Marks	Bloom's level	CO Nos.	PO Nos.	PSO Nos.
1-	निम्नलिखित प्रश्न का उत्तर लिखिए। जनसंचार के स्वरूप पर चर्चा करते हुए, उसकी परिभाषाओं पर प्रकाश डालें ?	15	R,U	1	PO2, PO3	PSO1
	अथवा					
1 -		15	R,U	1	PO2, PO3	PSO1

	इलेक्ट्रॉनिक जनसंचार माध्यमों के स्वरूप की समीक्षा कीजिए ?					
2 -	निम्नलिखित प्रश्न का उत्तर लिखिए। इंटरनेट व मोबाइल के विकासक्रम को स्पष्ट कीजिए ?	15	U,An	2	PO2 & PO3	PSO2
	अथवा					
2 -	दूरदर्शन व सिनेमा के क्रमगत विकास पर प्रकाश डालिए ?	15	U,An	2	PO2 & PO3	PSO2
3-1-	निम्नलिखित विषयों में से किन्हीं तीन पर टिप्पणी लिखिए। समाचारपत्र की भाषा	5	U, An	3	PO1, PO2, PO4	PSO2
3-2 -	रेडियो की भाषा	5	U, An	3	PO1, PO2, PO4	PSO2
3-3 -	साक्षात्कार के प्रमुख तत्त्व	5	U, An	3	PO1, PO2, PO4	PSO2
3-4 -	संवाद की विशेषताएँ	5	U, An	3	PO1, PO2, PO4	PSO2
3-5 -	फीचर की विशेषताएँ	5	U, An	3	PO1, PO2, PO4	PSO2
4-	निम्नलिखित प्रश्न का उत्तर लिखिए। संविधान द्वारा दिए गए मौलिक अधिकारों का विश्लेषण कीजिए ?	15	An, E & C	4	PO1, PO2, PO8	PSO3
	अथवा					
4 -	उरी ' फिल्म की समीक्षा लिखिए ?	15	An, E & C	4	PO1, PO2, PO8	PSO3



PO and CO Attainment in Semester End Examination 2022-23